

Application No. 09/731,506
Applicants: Albert Erdrich et al.
Amendment in Response to Office Action dated September 30, 2003

Amendments to the Claims:

The present listing of the claims replaces all past listings of the claims:

Listing of claims:

- Claim 1. (Currently Amended) Dental isolation material, containing comprising:
- 10 - 60 wt.-% water
 - 30 - 85 wt.-% C₂-C₄ alcohol
 - 2 - 10 wt.-% polyvinyl alcohol and
 - 0 - 30 wt.-% acetone.
- Claim 2. (Currently Amended) Dental isolation material according to claim 1, containing comprising:
- 40 - 50 wt.-% water
 - 45 - 55 wt.-% C₂-C₄ alcohol
 - 3 - 8 wt.-% polyvinyl alcohol and
 - 0 - 5 wt.-% acetone.
- Claim 3. (Currently Amended) Dental isolation material according to claim 1, characterized in that wherein the C₂-C₄ alcohol is ethanol.

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Claim 4. (Currently Amended) Dental isolation material according to claim 1,
~~characterized in that~~ wherein polyvinyl alcohol has a molecular mass greater than
60,000g/mol.

Claims 5 – 16. (Cancelled).

Claim 17. (Currently Amended) Method for making a prosthesis by comprising the
following steps:

- a) Overmodeling a dental trial fitting with an investment material to create an individual flask or rim,
- b) Curing the investment material by electromagnetic radiation,
- c) Coating the an inside of the polymerized investment material with an a dental isolating material according to claim 1,
- d) Pouring a dental plastic into the individual flask or rim and
- e) Deflasking by shattering the investment material.

Claims 18 – 29. (Cancelled).

Claim 30. (Currently Amended) Prosthesis, ~~characterized in that it~~ which is made by a
method of claim ~~46~~ 17.

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Claim 31. (Currently Amended) Method for making a prosthesis characterized in that at least one isolating material according to claim 1 is used and at least one according to claim 17, wherein the investment material containing comprises:

- 10 - 30 wt.- % polyethylene glycol dimethacrylate,
- 40 - 55 wt. % polymethyl methacrylate,
- 5 - 15 wt.- % highly disperse silicon dioxide
- < 1 wt. % photoinitiators, stabilizers,
- 0 - 10 wt.- % polyethylene glycol and
- 10 - 30 wt.- % of at least one compound selected from the group consisting of: urethane dimethacrylate, bis- GMA, and ethoxylated bis-GMA.

Claim 32. (Currently Amended) Method according to claim 31, characterized in that a transparent dental wherein the investment material comprises:

- 15 - 20 wt.- % polyethylene glycol dimethacrylate,
- 50 wt. % polymethyl methacrylate
- 10 - 15 wt.- % at least one compound selected from the group consisting of: urethane dimethacrylate, bis-GMA, and ethoxylated bis-GMA,
- 10 - 13 wt.- % highly disperse silicone dioxide,
- 0.4 - 0.6 wt.- % photoinitiators, stabilizers, and
- 5 - 10 wt.- % polyethylene glycol.

Claim 33. (Currently Amended) Method according claim 31, characterized in that wherein

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the polyethylene glycol dimethacrylate has a molecular mass > 500 g/mol.

Claim 34. (Currently Amended) Method according to claim 31, characterized in that
wherein the polyethylene glycol dimethacrylate is a solid at a temperature (T) of
approximately $T \pm 20^{\circ}$ C.

Claim 35. (Currently Amended) Method according to claim 31, characterized in that
wherein the polymethyl methacrylate has a molecular mass of > 160,000, an average
grain size of 80 – 140 μ m and a benzoyl peroxide content < 0.1 wt.-%.

Claim 36. (Currently Amended) Method according to claim 31, characterized in that
wherein the polymethyl methacrylate is a copolymer which has been made with
comprising up to 10 wt.-% comonomer.

Claim 37. (Currently Amended) Method according to claim 31, characterized in that
wherein the polyethylene glycol is a fluid at a temperature (T) of approximately $T \pm 20^{\circ}$
C and has an average molecular mass of 200 g/mol.

Claim 38. (Currently Amended) Method according to claim 31, characterized in that
wherein the urethane dimethacrylate has a minimum molar mass at the level of 450
g/mol.

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Claim 39. (Currently Amended) Method according to claim 31, characterized in that
wherein the polymethyl methacrylate is in the form of a suspension polymerizate.

Claim 40. (Currently Amended) Method according to claim 31 ~~17~~, characterized in that
wherein the dental plastic is curable by means of electromagnetic radiation ~~is used as~~
~~dental plastic.~~

Claim 41. (Currently Amended) Method according to claim 31, characterized in that further
comprising the step of setting up retentions ~~are set up~~ after the overmodeling and
before the coating.

Claim 42. (Canceled).

Claim 43. (Canceled).

Claim 44. (Canceled).

Claim 45. (New) A dental method comprising making a direct dental impression for an inlay
by means of a carving plastic, wherein an isolation against dentin in said method
comprises an isolation material according to claim 1.

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Claim 46. (New) A dental method comprising carving work for inlays, onlays or crowns, wherein an isolation against plaster of Paris employed in said method comprises an isolation material according to claim 1.

Claim 47. (New) A dental method comprising an add-on or repair, wherein a protection in said method for polymerized plastic against unpolymerized material comprises an isolation material according to claim 1.

Claim 48. (New) The dental method according to claim 47, wherein the protection is for the avoidance of crazing on prosthesis teeth by monomers.

Claim 49. (New) A total or partial prosthesis comprising an isolation material according to claim 1.